GROUP 4A INSECTICIDE

GAUCHO® 550 SC Insecticide

EPA Reg. No. 264-827 EPA Est. No.

Contains 4.6 pounds of active ingredient per gallon or 550 grams Al/liter.

SHAKE WELL BEFORE USING

STOP - Read the label before use KEEP OUT OF REACH OF CHILDREN CAUTION

For <u>MEDICAL</u> And <u>TRANSPORTATION</u> Emergencies <u>ONLY</u> Call 24 Hours A Day 1-800-334-7577 For <u>PRODUCT USE</u> Information Call 1-866-99BAYER (1-866-992-2937)

FIRST AID

IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice.
	Have person sip a glass of water if able to swallow.
	Do not induce vomiting unless told to do so by a poison control center or doctor.
	Do not give anything by mouth to an unconscious person.
IF ON SKIN OR	Take off contaminated clothing.
CLOTHING	Rinse skin immediately with plenty of water for 15 to 20 minutes.
	Call a poison control center or doctor for treatment advice.
IF INHALED	Move person to fresh air.
	If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
	Call a poison control center or doctor for further treatment advice.
IF IN EYES	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
	Call a poison control center or doctor for treatment advice.

In case of emergency call toll free the Bayer CropScience Emergency Response Telephone No. 1-800-334-7577. Have a product container or label with you when calling a poison control center or doctor, or going for treatment.

Note To Physician: No specific antidote is available. Treat the patient symptomatically.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS CAUTION

Harmful if swallowed, absorbed through skin or inhaled. Avoid breathing vapor or spray mist. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton.
- Shoes plus socks

Follow manufacturer's instructions for cleaning/ maintaining personal protective equipment, PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

ENGINEERING CONTROLS STATEMENTS

• When handlers use closed systems or enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

User Safety Recommendations:

User should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are foraging the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.



APPLICATION RESTRICTIONS EXIST FOR THIS

PRODUCT BECAUSE OF RISK TO BEES AND OTHER INSECT POLLINATORS. FOLLOW APPLICATION RESTRICTIONS FOUND IN THE DIRECTIONS FOR USE TO PROTECT POLLINATORS.

Look for the bee hazard icon in the Directions for Use for each application site for specific use restrictions and instructions to protect bees and other insect pollinators.

This product can kill bees and other insect pollinators.

Bees and other insect pollinators will forage on plants when they flower, shed pollen, or produce nectar.

Bees and other insect pollinators can be exposed to this pesticide from:

- Direct contact during foliar applications, or contact with residues on plant surfaces after foliar applications
- o Ingestion of residues in nectar and pollen when the pesticide is applied as a seed treatment, soil, tree injection, as well as foliar applications.

When Using This Product Take Steps To:

- o Minimize exposure of this product to bees and other insect pollinators when they are foraging on pollinator attractive plants around the application site.
- Minimize drift of this product on to beehives or to off-site pollinator attractive habitat.
 Drift of this product onto beehives or off-site to pollinator attractive habitat can result in bee kills.

Information on protecting bees and other insect pollinators may be found at the Pesticide Environmental Stewardship website at:

http://pesticidestewardship.org/PollinatorProtection/Pages/default.aspx.

Pesticide incidents (for example, bee kills) should immediately be reported to the state/tribal lead agency. For contact information for your state, go to: www.aapco.org/officials.html. Pesticide incidents should also be reported to the National Pesticide Information Center at: www.npic.orst.edu or directly to EPA at: beekill@epa.gov

TAKE THE FOLLOWING PRECAUTIONS WHEN MIXING AND APPLYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

Spray Drift Management

The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making application decisions. <u>Avoiding spray drift is the responsibility of the applicator.</u>

Importance of Droplet Size

An important factor influencing drift is droplet size. Small droplets (<150 - 200 microns) drift to a greater extent than large droplets. Within typical equipment specifications make applications to deliver the largest droplet spectrum that provides sufficient control and coverage. Formation of very small droplets may be minimized by appropriate nozzle selection.

Wind Speed Restrictions

Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. However, many factors, including droplet size, canopy and equipment specifications determine drift potential at any given wind speed. Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. However, for applications of GAUCHO® 550 SC Insecticide made infurrow or below soil-level, wind speed restrictions are not applicable. Risk of exposure to sensitive aquatic areas can be reduced by avoiding applications when wind direction is toward the aquatic area.

Restrictions During Temperature Inversions

Do not make aerial or ground applications during temperature inversions. Drift potential is high during temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain close to the ground and move laterally in a concentrated cloud. Temperature inversions are characterized by increasing temperature with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the morning. Their presence can be indicated by ground fog; however if fog is not present, inversions can also be identified by the movement of smoke from a ground source. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical mixing.

Airblast (Air Assist) Specific Instructions for Tree Crops and Vineyards

Airblast sprayers carry droplets into the canopy of trees/vines via a radially, or laterally directed air stream. Follow the following specific drift management practices:

- Adjust deflectors and aiming devices so that spray is only directed into the canopy;
- Block off upward pointed nozzles when there is no overhanging canopy;
- Use only enough air volume to penetrate the canopy and provide good coverage;
- Do not allow the spray to go beyond the edge of the cultivated area (i.e., turn off sprayer when turning at end rows);
- Only spray inward, toward the orchard or vineyard, for applications to the outside rows.

Mixing and Loading Requirements

To avoid potential contamination of groundwater, use a properly designed and maintained containment pad for mixing and loading of any pesticide into application equipment where possible. If containment pad is not used, maintain a minimum distance of 25 feet between mixing and loading area and potential surface to groundwater conduits such as field sumps, uncased well heads, sink-holes, or field drains.

For Aerial Applications

Mount the spray boom on the aircraft so as to minimize drift caused by wing tip vortices. The minimum practical boom length should be used, and must not exceed 75% of the wing span or rotor diameter.

No-Spray Zone Requirements for Soil Applications

Do not apply within 25 feet, of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries and commercial fish farm ponds.

No-Spray Zone Requirements for Foliar Applications

Do not apply by ground within 25 feet, or by air within 150 feet of lakes; reservoirs; rivers; permanent streams, marshes or natural ponds; estuaries and commercial fish farm ponds.

Runoff Management

Do not cultivate within 10 feet of the aquatic areas to allow growth of a vegetative filter strip. When using GAUCHO 550 SC INSECTICIDE on erodible soils, employ the Best Management Practices for minimizing runoff. Consult your local Natural Resources Conservation Service for advice in your use area.

Endangered Species Notice

Under the Endangered Species Act, it is a Federal Offense to use any pesticide in a manner that results in the death of a member of an endangered species. Consult your local county bulletin, County Extension Agent, or Pesticide State Lead Agency for information concerning endangered species in your area.

Resistance Management

Some insects are known to develop resistance to insecticides after repeated use. As with any insecticide, use the product in conformance with resistance management strategies established for the use area. GAUCHO 550 SC INSECTICIDE contains a Group

4A insecticide. Insect biotypes with acquired or inherent resistance to Group 4A insecticides may eventually dominate the insect population if Group 4A insecticides are used repeatedly as the predominant method of control for targeted species.

The active ingredient in GAUCHO 550 SC INSECTICIDE is a member of the neonicotinoid chemical class. Insect pests resistant to other chemical classes have not shown cross-resistance to GAUCHO 550 SC INSECTICIDE.

In order to maintain susceptibility to this class of chemistry in insect species with high resistance development potential, it is recommended that for each crop season: 1) if using a soil-applied program, only a single application of GAUCHO 550 SC INSECTICIDE be made with no additional foliar applications from Group 4A Insecticides; or, 2) if using a foliar-applied program, avoid using a block of more than three consecutive applications of GAUCHO 550 SC INSECTICIDE or other Group 4A products having the same or similar mode of action. A foliar-applied Group 4A Insecticide program and a soil-applied Group 4A program should not be used during the same crop-season when targeting insect species with high resistance development potential.

Contact your Cooperative Extension specialist, certified crop advisor and/or product manufacturer for additional insect resistance management recommendations. Also, for more information on Insect Resistance Management (IRM), visit the Insecticide Resistance Action Committee (IRAC) on the web at http://www.irac-online.org.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

See individual crops for specific pollinator protection application restrictions. If none exist under the specific crop, for foliar applications, follow these application directions for crops that are contracted to have pollinator services or for food/feed & commercially grown ornamentals that are attractive to pollinators:

FOR CROPS UNDER CONTRACTED POLLINATION SERVICES

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless the following condition has been met.

If an application must be made when managed bees are at the treatment site, the beekeeper providing the pollination services must be notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying.

FOR FOOD CROPS AND COMMERCIALLY GROWN ORNAMENTALS NOT UNDER CONTRACT FOR POLLINATION SERVICES BUT ARE ATTRACTIVE TO POLLINATORS

Do not apply this product while bees are foraging. Do not apply this product until flowering is complete and all petals have fallen unless one of the following conditions is met:

- The application is made to the target site after sunset
- The application is made to the target site when temperatures are below 55°F
- The application is made in accordance with a government-initiated public health response
- The application is made in accordance with an active state-administered apiary registry program where beekeepers are notified no less than 48-hours prior to the time of the planned application so that the bees can be removed, covered or otherwise protected prior to spraying
- The application is made due to an imminent threat of significant crop loss, and a documented determination
 consistent with an IPM plan or predetermined economic threshold is met. Every effort should be made to notify
 beekeepers no less than 48-hours prior to the time of the planned application so that the bees can be removed,
 covered or otherwise protected prior to spraying.



AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

Exception: If the product is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls
- Chemical-resistant gloves made of any waterproof material such as, barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinylchloride (PVC) or viton
- Shoes plus socks

Application Directions (Soil)

Direct applications of GAUCHO 550 SC INSECTICIDE into the seed or root-zone of crop. Failure to place GAUCHO 550 SC INSECTICIDE into root-zone may result in loss of control or delay in onset of activity. Apply GAUCHO 550 SC INSECTICIDE by ground application or chemigation application. For seedling flats or trays, only apply with broadcast, foliar applications or where product is intended to be washed from foliage to soil prior to drying on foliage.

Optimum activity of GAUCHO 550 SC INSECTICIDE results from applications to the root-zone of plants to be protected. The earlier GAUCHO 550 SC INSECTICIDE is available to a developing plant, the earlier the protection begins. GAUCHO 550 SC INSECTICIDE is continuously taken into the roots over a long period of time and the systemic nature of GAUCHO 550 SC INSECTICIDE allows movement from roots through the xylem tissue to all vegetative parts of the plant. This results in residual activity of GAUCHO 550 SC INSECTICIDE and the control of insects which may vector pathogens thereby reducing disease transmission or symptom expression, and the promotion of plant health benefits. The rate of GAUCHO 550 SC INSECTICIDE applied affects the length of the plant protection period. Use the higher listed rates when infestations occur later in crop development, or where pest pressure is continuous. GAUCHO 550 SC INSECTICIDE will generally not control insects infesting flowers, blooms or fruit. Additional crop protection may be required for insects feeding in, or on these plant parts and for insects not listed in the crop-specific, pests controlled sections of this label. Additional, specific GAUCHO 550 SC INSECTICIDE application rates are also provided in the crop-specific sections of this label.

Restrictions (Soil applications)

Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically.

Do not apply more than 0.5 lb active ingredient per acre, per year regardless of formulation or method of application, unless specified within a crop-specific section for a given crop.

Application Directions (Foliar)

Apply GAUCHO 550 SC INSECTICIDE with properly calibrated ground or aerial application equipment. Apply specified rate per acre as a directed or broadcast spray to infested area at earliest threshold for target pest, as population begins to develop. Thorough uniform coverage of all plant parts is required to achieve optimum control. Scout fields and retreat if needed.

The lower rates can be used early season when pest pressures are low or when tank-mixing with other effective products registered for target insect control. Degree of control or suppression of additional labeled pests will be determined, in part, by the stage of pest development at application and infestation level of those pests. GAUCHO 550 SC INSECTICIDE provides optimal performance against early instar and early nymphal stages of insects as well as bollworm/budworm eggs. Applications made with less than 5 gallons per acre may result in slower activity and/or less overall control from a single application than an application made with higher gallonages. Use an organosilicone-based spray adjuvant for applications targeting aphids and whiteflies for better control.

Suppression or less than complete control of certain diseases and insect pests including reduced feeding may also result from GAUCHO 550 SC INSECTICIDE applications. Complete control of these pests/diseases may require supplemental control measures.

GAUCHO 550 SC INSECTICIDE is not intended for use on crops grown for production of true seed for private or commercial planting unless allowed under State specific 24(c) labeling. As with any insecticide, care must be taken to minimize exposure of GAUCHO 550 SC INSECTICIDE to honey bees and other pollinators. Additional information on GAUCHO 550 SC INSECTICIDE uses for these crops and other questions may be obtained from the Cooperative Extension Service, PCAs, consultants or local Bayer CropScience representatives.

Make application only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically.

Pre-mix GAUCHO 550 SC INSECTICIDE with water or other appropriate diluent prior to application. Keep GAUCHO 550 SC INSECTICIDE and water suspension agitated to avoid settling.

Additional Product Use information may be obtained by calling 1-866-99BAYER (1-866-992-2937).

Restrictions (Foliar applications)

Do not apply more than 0.5 lb active ingredient per acre, per year regardless of formulation or method of application, unless specified within a crop-specific section for a given crop.

Mixing Instructions

GAUCHO 550 SC INSECTICIDE is a suspension concentrate (flowable) formulation, shake well prior to measuring/mixing. The formulation is thixotropic and after sitting for a short time reverts to a gel or thick paste consistency helping to prevent phase separation common to most "flowables". After moderate shaking the formulation thins to a relatively non-viscous liquid which pours and measures easily with very few trapped air bubbles - another common problem of most flowables.

GAUCHO 550 SC INSECTICIDE has demonstrated easy mixing/blooming in water with varying degrees of hardness and temperature. GAUCHO 550 SC INSECTICIDE has demonstrated good mixing and compatibility with many fluid fertilizers without dilution with water. However, because fertilizers vary widely in quality and composition it is suggested that a jar test be performed (see Compatibility Note below) prior to full-scale mixing.

To prepare the application mixture, add a portion of the required amount of water/fertilizer to the tank and with agitation add GAUCHO 550 SC INSECTICIDE. Complete filling tank with balance of water/fertilizer needed. Maintain sufficient agitation during both mixing and application. GAUCHO 550 SC INSECTICIDE may also be used with other pesticides. **Please see Compatibility Note below**. When tank mixtures of GAUCHO 550 SC INSECTICIDE and other pesticides are involved, prepare the tank mixture as specified above and follow suggested Mixing Order below.

Mixing Order

When pesticide mixtures are needed, add wettable powders or wettable granules first, GAUCHO 550 SC INSECTICIDE and other suspension concentrate (flowable) products second, and emulsifiable concentrates last. Ensure good agitation as each component is added. Do not add an additional component until the previous is thoroughly mixed. If a fertilizer solution is added or used as the diluent, a fertilizer/pesticide compatibility agent may be needed. Maintain constant agitation during both mixing and application to ensure uniformity of spray mixture.

Compatibility Information

Test compatibility of the intended mixture before adding GAUCHO 550 SC INSECTICIDE to the spray or mix tank. Add proportionate amounts of each ingredient in the appropriate order, to a pint or quart jar, cap, shake for 5 minutes, and let set for 5 minutes. Poor mixing or formation of precipitates that do not readily redisperse indicates an incompatible mixture that should not be used. For further information, contact your local Bayer CropScience representative.

CHEMIGATION – DIRECTIONS FOR USE

Types of Irrigation Systems

Chemigation applications of GAUCHO 550 SC INSECTICIDE may be made to crops through chemigation systems as specified in crop-specific, Application sections.

Uniform Water Distribution and System Calibration

The irrigation system must provide uniform distribution of treated water. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from non-uniform distribution of treated water. The system must be calibrated to uniformly apply the rates specified. If you have questions about calibration, contact Cooperative Extension Service specialists, equipment manufacturers or other experts.

Chemigation Monitoring

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Drift

Do not apply when wind speed favors drift beyond the area intended for treatment.

Required System Safety Devices

The system must contain a functional check valve, vacuum relief valve, and low-pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

Using Water from Public Water Systems

Public water system means a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, back flow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and to top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. The pesticide injection pipeline must contain a functional automatic quick-closing check valve to prevent the flow of fluid back toward the injection. The pesticide injection pipeline must contain a functional normally closed solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops or in cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected. Systems must use a metering pump such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

ROTATIONAL CROPS*

Treated areas may be replanted with any crop specified on an imidacloprid label, or any crop for which a tolerance exists for the active ingredient, as soon as practical following the last application. For crops not listed on an imidacloprid label, or for crops for which no tolerances for the active ingredient have been established, a 12-month plant-back interval must be observed.

IMMEDIATE PLANT-BACK:

All crops on this label plus the following crops not on this label: barley, canola, corn (field, pop & sweet), rapeseed, sorghum, and wheat.

30-DAY PLANT-BACK:

Cereals (including buckwheat, millet, oats, rice, rye, and triticale), safflower

12-MONTH PLANT-BACK:

All Other Crops

* Cover crops for soil building or erosion control may be planted any time, but do not graze or harvest for food or feed.

FIELD CROPS

Application Rates – GAUCHO 550 SC Insecticide

COTTON - SOIL

Pests Controlled	Rate fluid ounces/Acre
Cotton aphid	
Plant bugs	7.4 – 9.2
Thrips	(Depending on row-spacing)
Whiteflies	

Cotton – Soil Applications

Apply specified dosage in one of the following methods:

- 1. In-furrow spray during planting directed on or below seed;
- 2. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
- 3. Chemigation into root-zone through low-pressure drip or trickle irrigation.

Cotton - Soil Application Restrictions

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 9.2 fluid ounces/Acre (0.33 lb Al/Acre)

Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per year, including seed treatment, soil <u>and</u> foliar uses. If Imidacloprid was previously applied to seed that has been planted at seeding rate of 85,000 seeds per acre, apply no more than 0.43 lb of active ingredient as foliar and/or soil uses. Do not graze treated fields after any application of GAUCHO 550 SC INSECTICIDE. Please see Resistance Management section of this label.

COTTON - FOLIAR

Rate fluid ounces/Acre
0.9 – 1.7
1.3 – 1.7
1.0 – 1.7

Cotton – Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground or aerial application equipment.

Cotton – Foliar Application Restrictions Pre-Harvest Interval (PHI): 14 days

Minimum interval between foliar applications: 7 days

Maximum foliar applied GAUCHO 550 SC INSECTICIDE allowed per year: 8.7 fluid ounces/Acre (0.31 lb Al/Acre)

Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per year, including seed treatment, soil <u>and</u> foliar uses. If Imidacloprid was previously applied to seed that has been planted at seeding rate of 85,000 seeds per acre, apply no more than 0.43 lb of active ingredient as foliar and/or soil uses.

Do not graze treated fields after any application of GAUCHO 550 SC INSECTICIDE. Please see Resistance Management section of this label.

PEANUT - SOIL 1/

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	7.0 – 10.5
Pests Suppressed	
Thrips	7.0 – 10.5

Peanut - Soil Application

Apply specified dosage in one of the following methods:

- 1. In-furrow spray during planting directed on or below seed;
- 2. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Peanut - Soil Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

Notes

Increases in Tomato spotted wilt virus (TSWV) incidence have been observed with applications of GAUCHO 550 SC INSECTICIDE on multiple varieties of peanut. This may also be the case with other tospoviruses, or other viruses transmitted by various thrips species or perhaps, other pests. Prior to applying GAUCHO 550 SC INSECTICIDE to peanuts, Bayer CropScience recommends consultation with the State, Cooperative Extension Service, or Bayer CropScience representative, for recommendations. Growers are advised to weigh insect control benefits against potential increase in viral disease levels. In areas where TSWV or other tospovirus are endemic, growers are encouraged to use virus resistant varieties and consult the University of Georgia, Tomato spotted wilt virus index, before applying GAUCHO 550 SC INSECTICIDE.

¹ Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

PEANUT - FOLIAR 1/

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies	1.2
Pest Suppressed	
Thrips	1.2

Peanut – Foliar Application

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment.

Peanut - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Maximum foliar applied GAUCHO 550 SC INSECTICIDE allowed per year: 3.7 fluid ounces/Acre (0.13 lb Al/Acre)

Minimum interval between foliar applications: 5 days

¹/_{Use} not permitted in California unless otherwise directed by state specific 24(c) labeling.

POTATO - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Colorado potato beetle	
Flea beetles	5.7 - 8.7
Leafhoppers	
Potato psyllid	
Pests / Diseases Suppressed	
Symptoms of:	
Potato leaf roll virus (PLRV)	
Potato yellows	5.7 – 8.7
Net necrosis	
Wireworms (with in-furrow spray at-planting)	

Potato - Soil Applications

Apply specified dosage in one of the following methods:

- 1. In-furrow spray during planting directed on seed pieces or seed potatoes;
- 2. Subsurface side-dress on both sides of the row covered with 3 or more inches of soil;
- 3. Narrow band spray at ground cracking directly over the row during hilling covered with 3 or more inches of soil;
- 4. Narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting. For effective pest control or suppression, GAUCHO 550 SC INSECTICIDE applications must be placed below soil-surface and in contact with seed piece or within root-zone. For potatoes grown on highly permeable soils with shallow water table, at-plant applications of GAUCHO 550 SC INSECTICIDE may be made in a 2 to 4 inch band (width of planter shoe opening) and completely covered.

Potato - Soil Application Restrictions

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.7 fluid ounces/Acre (0.31 lb Al/Acre)

POTATO - SEED-PIECE TREATMENT

Pests Controlled	Rate fluid ounces/100 lbs seed	Rate fluid ounces/Acre*
Aphids Colorado potato beetle Flea beetles Leafhoppers Potato psyllid Wireworms (seed-piece protection)	0.17 – 0.35	3.5 – 7.0
Diseases Suppressed		
Symptoms of: Potato leaf roll virus (PLRV) Potato yellows Net necrosis	0.35	7.0

Potato - Seed-piece Application

Apply specified dosage as a diluted spray onto seed-pieces using a shielded spray system. Dilute with 3 parts water, or less, to 1 part GAUCHO 550 SC INSECTICIDE. Agitate or stir spray solution as needed. Fungicidal or inert absorbent dusts may be applied after GAUCHO 550 SC INSECTICIDE application. Apply only in areas with adequate ventilation or in areas that are equipped to remove spray mist or dust. Plant seed-pieces as soon as possible after treating avoiding prolonged exposure of GAUCHO 550 SC INSECTICIDE treated seed-pieces to sunlight and in accordance with the recommendation of your local Extension specialist.

Potato - Seed-piece Application Restrictions

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.7 fluid ounces/Acre (0.31 lb Al/Acre)

Do not use treated seed-pieces for food, feed, or fodder.

* BASED ON A SEEDING RATE OF 2000 LBS/ACRE.

POTATO – FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Colorado potato beetle	
Flea beetles	1.3
Leafhoppers	1.3
Potato psyllid	

Potato - Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment.

Potato – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between foliar applications: 7 days

Maximum foliar applied GAUCHO 550 SC INSECTICIDE allowed per year: 5.6 fluid ounces/Acre (0.2 lb Al/Acre)

SOYBEAN - FOLIAR 1/

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Bean leaf beetle	
Cucumber beetles / Rootworm adults	1.3
Japanese beetle (adults)	
Leafhoppers	
Whiteflies	

Soybean - Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment.

Sovbean - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Minimum interval between foliar applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 3.9 fluid ounces/Acre (0.14 lb Al/Acre)

Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per year, including seed treatment, soil and foliar uses. If Imidacloprid was previously applied to seed that has been planted at seeding rate of 160,000 seeds per acre, apply no more than 0.43 lb of active ingredient as foliar and/or soil uses.

¹/_{Use} not permitted in California unless otherwise directed by state specific 24(c) labeling.

TOBACCO - TRAY DRENCH / SOIL

Pests Controlled	Rate fluid ounces/1000 plants (as seedling tray drench)	Rate fluid ounces/1000 plants (in-furrow or transplant-water)
Aphids Flea beetles	0.5	0.6
Mole crickets Whiteflies Wireworms	0.6 – 1.2	0.8 – 1.2
Pests / Diseases Suppressed		
Cutworms Symptoms of: Tomato spotted wilt virus (TSWV)	0.6 – 1.2	0.8 – 1.2

Tobacco - Tray Drench / Soil Applications

Apply specified dosage in one of the following methods:

- 1. Uniform, broadcast foliar spray to seedlings in trays (tray drench) not more than 7 days prior to transplanting followed immediately by overhead irrigation to wash GAUCHO 550 SC INSECTICIDE from foliage into potting media. Failure to wash GAUCHO 550 SC INSECTICIDE from foliage may result in a reduction in pest control. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots;
- 2. In-furrow spray or transplant-water drench during setting;
- 3. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Tobacco - Tray Drench / Soil Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Tobacco - Tray Drench / Soil Application Note

Proper tray drench applications of GAUCHO 550 SC INSECTICIDE have been shown to be the most efficacious method of application. However, the specified rate of GAUCHO 550 SC INSECTICIDE may be applied as combination of the tray drench in the planthouse and/or transplant-water drench in field. Adverse growing conditions may cause a delay in uptake of GAUCHO 550 SC INSECTICIDE into the plant and a delay in control.

TOBACCO - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	0.7 – 1.4
Flea beetles Japanese beetle	1.4

Tobacco - Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment.

Tobacco - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Minimum interval between foliar applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 7.8 fluid ounces/Acre (0.28 lb Al/Acre)

VEGETABLE and SMALL FRUIT CROPS

Application Rates - GAUCHO 550 SC Insecticide

CUCURBIT VEGETABLES - SOIL 1/

Crops of Crop Group 9 including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

Pests Controlled	Rate fluid ounces/Acre
Aphids Cucumber beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	7.0 – 10.5
Diseases Suppressed	
Bacterial wilt (as vectored by various cucumber beetles) Leaf silvering resulting from whitefly feeding	7.0 – 10.5

Cucurbit Vegetables – Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 1/2" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench, or hill drench;
- 6. Subsurface side-dress on both sides of each row. GAUCHO 550 SC INSECTICIDE must be incorporated into root-zone.

Cucurbit Vegetables – Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

CUCURBIT VEGETABLES - PLANTHOUSE 1/2/

Crops of Crop Group 9 including: Chayote (fruit), Chinese waxgourd (Chinese preserving melon), Citron melon, Cuban pumpkin, Cucumber, Gherkin, Gourd (edible, includes hyotan, cucuzza, hechima, Chinese okra), *Momordica* spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber), Muskmelon (hybrids and/or cultivars of *Cucumis melo* including true cantaloupe, cantaloupe, casaba, Crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, snake melon and Winter melon), Pumpkin, Squash (includes summer squash types such as: butternut squash, calabaza, crookneck squash, Hubbard squash, scallop squash, straightneck squash, vegetable marrow and zucchini, and winter squash types such as acorn squash and spaghetti squash), Watermelon (includes hybrids and/or varieties of *Citrullus lanatus*)

Pests Controlled	Rate fluid ounces/10,000 Plants
Aphids Whiteflies	0.44

Cucurbit Vegetables - Planthouse Applications

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following methods:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash GAUCHO 550 SC INSECTICIDE from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash GAUCHO 550 SC INSECTICIDE from foliage may result in reduced pest control:
- 2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.

Cucurbit Vegetables – Planthouse Application Restrictions

Maximum amount GAUCHO 550 SC INSECTICIDE applied in the planthouse: **0.44 fluid ounces** (0.0156 lb AI)/**10,000 plants**. Maximum number GAUCHO 550 SC INSECTICIDE applications in planthouse: **1**

Cucurbit Vegetables – Planthouse Application Notes

Not all varieties of cucurbit vegetables have been tested for tolerance to GAUCHO 550 SC INSECTICIDE applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

- ¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.
- ²/ Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

BULB VEGETABLE (Allium sp.) Group 3-07 - SOIL 1/

Crops of Crop Group 3-07 Including: Chive (fresh leaves), Chinese chive (fresh leaves), Daylily (bulb), Elegans hosta, Fritillaria (bulb and leaves), Garlic (common group, great-headed group, serpent group), Kurrat group, Leek group (including common, lady's and wild), Lily (bulb), Onion (bulb and green leaves including: common group, Beltsville bunching, Chinese bulb, fresh, green, macrostem, Pearl group, potato onion group, tree onion-tops, Welsh-tops), Shallot, plus cultivars, varieties, and/or hybrids of these

Pests Controlled	Rate fluid ounces/Acre
Thrips (foliage feeding thrips only)	14.0

Bulb Vegetable - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed:
- 3. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting:
- 4. Post-seeding drench, transplant-water drench, or hill drench.

Bulb Vegetable - Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Applications made to higher organic matter soils may result in reduced or shortened activity on pest.

1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

GREENHOUSE VEGETABLES – SOIL 1/

(Mature Cucumber and Tomato plants only in production greenhouses)

Pests Controlled	Rate fluid ounces/1000 plants
Aphids Whiteflies	0.6

Greenhouse Vegetables - Soil Applications

Apply specified dosage in a minimum of 16 gallons of water for tomatoes and 21 gallons of water for cucumbers using soil drenches, micro-irrigation, drip irrigation, or hand-held or motorized calibrated irrigation equipment. Apply only to plants grown in field-type soils, potting media, or mixtures thereof. Do not apply to plants grown in non-soil medias such as perlite, vermiculite, rock wool or other soil-less media, or plants growing hydroponically. Do not apply to immature plants since phytotoxicity may occur.

Apply when infestation pressure surpasses threshold and beneficials are not able to maintain pest populations below damage thresholds. Repellency of bumble bee pollinators and negative effects on some beneficials (*Orius* sp.) can occur when GAUCHO 550 SC INSECTICIDE is applied.

Many varieties of vegetables have been tested for tolerance to GAUCHO 550 SC INSECTICIDE and show good safety. However, certain varieties may show more sensitivity to GAUCHO 550 SC INSECTICIDE. Therefore, treatment of a few plants is recommended before treating the whole greenhouse.

Greenhouse Vegetables - Soil Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum number GAUCHO 550 SC INSECTICIDE applications per crop season: 1.

1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

FRUITING VEGETABLES - SOIL 1/

Crops of Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet) Tomato, Pepinos, Tomatillo

Field Application Rates. See details below for additional planthouse rates.	
Pests Controlled	Rate fluid ounces/Acre
Aphids Colorado potato beetle Flea beetles	Okra and Pepper 7.0 – 14.0
Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	Other Crops 7.0 – 10.5
Diseases Suppressed	
Symptoms of: Tomato mottle virus Tomato spotted wilt virus	Okra and Pepper 7.0 – 14.0 Other Crops
Tomato yellow leaf curl virus	7.0 – 10.5

Fruiting Vegetables - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1 1/2" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench, or hill drench;
- 6. Subsurface side-dress on both sides of each row. GAUCHO 550 SC INSECTICIDE must be incorporated into root-zone.

Fruiting Vegetable - Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed on pepper and okra crops per crop season: **14.0 fluid ounces/Acre** (0.5 lb Al/Acre)

Maximum GAUCHO 550 SC INSECTICIDE allowed on other fruiting vegetable crops per crop season: **10.5 fluid ounces/Acre** (0.38 lb Al/Acre)

¹/₁ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

FRUITING VEGETABLES - PLANTHOUSE 1/2

Crops of Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet) Tomato, Pepinos, Tomatillo

Pests Controlled	Rate fluid ounces/10,000 Plants
Aphids Whiteflies	0.44

Fruiting Vegetable – Planthouse Applications

Apply specified dosage to seedlings in trays in the planthouse, targeting soil media (tray drench), not more than 7 days prior to transplanting, in one of the following methods:

- Uniform, broadcast high-volume foliar spray, followed immediately by sufficient overhead irrigation to wash GAUCHO 550 SC INSECTICIDE from foliage into potting media without loss of gravitational liquid from the bottom of the tray. Failure to wash GAUCHO 550 SC INSECTICIDE from foliage may result in reduced pest control:
- 2. Injection into overhead irrigation system, using adequate volume to thoroughly saturate soil media without loss of gravitational solution from the bottom of the tray.

The application made in the planthouse will only provide short-term protection and is not intended as a substitution for a field application. An additional field application must be made within 2 weeks following transplanting to provide continuous protection. Applications of higher rates or increased number of applications in planthouse may result in significant plant injury. Transplants must be handled carefully during setting to avoid dislodging treated potting media from roots.

Fruiting Vegetable - Planthouse Application Restrictions

Maximum amount GAUCHO 550 SC INSECTICIDE applied in the planthouse: **0.44 fluid ounces** (0.0156 lb Al)/**10,000 plants**. Maximum number GAUCHO 550 SC INSECTICIDE applications in planthouse: **1**

Fruiting Vegetable – Planthouse Application Note

Not all varieties of fruiting vegetables have been tested for tolerance to GAUCHO 550 SC INSECTICIDE applied to seedling flats. It is therefore recommended to treat a small number of plants and confirm tolerance for 7 days prior to treating entire planthouse.

- ¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.
- ²/ Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

FRUITING VEGETABLES - FOLIAR 1/

Crops of Crop Group 8 plus Okra including: Eggplant, Ground cherry, Okra, Pepper (including bell, chili, cooking, pimento and sweet) Tomato. Pepinos. Tomatillo

Pests Controlled	Rate fluid ounces/Acre
Aphids Colorado potato beetle Leafhoppers Whiteflies	1.3 – 2.2
Pepper weevil (Pepper only)	2.2

Fruiting Vegetables - Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment. Thorough coverage with direct contact of the spray material to the target pests is required for optimum control. For pepper weevil, apply specified dosage of GAUCHO 550 SC INSECTICIDE by ground equipment only, timing applications prior to a damaging population becoming established. Good coverage of foliage and fruit is necessary for optimum control. Applications of GAUCHO 550 SC INSECTICIDE must be incorporated into a full-season program, where alternations of effective products from multiple classes of chemistry and different modes of action are utilized in a blocked or windowed approach.

For additional information, please contact your Bayer CropScience representative, Extension specialist or Crop Advisor.

Fruiting Vegetables - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Minimum interval between foliar applications: 5 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 6.7 fluid ounces/Acre (0.24 lb Al/Acre)

1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

GLOBE ARTICHOKE - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers	7.0 - 14.0

Globe Artichoke - Soil Applications

Apply specified dosage in the following method:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray at planting directed on or below seed

Globe Artichoke - Soil Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

GLOBE ARTICHOKE – FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers	1.4 – 3.5

Globe Artichoke - Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment.

Globe Artichoke - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

HERBS - SOIL

Crops of Crop Subgroup 19A including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Bumet, Camomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood.

Pests Controlled	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Whiteflies	7.0 – 10.5
Pest Suppressed	
Thrips (foliage feeding thrips only)	7.0 – 10.5

Herbs – Soil Applications

Apply specified dosage in one of the following methods:

- 1. In-furrow spray during planting directed on or below seed;
- 2. In-furrow spray or transplant-water drench during setting or transplanting;
- 3. Shanked-into or below eventual seed-line;
- 4. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Herbs – Soil Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

Herbs - Soil Application Note

Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Bayer CropScience strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

HERBS – FOLIAR

Crops of Crop Subgroup 19A including: Angelica, Balm (lemon balm), Basil (fresh and dried), Borage, Bumet, Camomile, Catnip, Chervil (dried), Chinese chive, Chive, Clary, Coriander (cilantro or Chinese parsley leaves), Costmary, Culantro (leaf), Curry (leaf), Dillweed, Horehound, Hyssop, Lavender, Lemongrass, Lovage (leaf), Marigold, Marjoram, Nasturtium, Parsley (dried), Pennyroyal, Rosemary, Rue, Sage, Savory (summer and winter), Sweet bay (bay leaf), Tansy, Tarragon, Thyme, Wintergreen, Woodruff, Wormwood.

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Flea beetles	4.0
Leafhoppers	1.2
Whiteflies	

Herbs – Foliar Applications

Apply GAUCHO 550 SC INSECTICIDE through properly calibrated ground and aerial application equipment.

Herbs – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 5 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per season: 3.6 fluid ounces/Acre (0.13 lb Al/Acre)

Herbs – Foliar Application Note

Not all crops and/or varieties listed above have been tested for phytotoxic effects. Without specific knowledge about a particular crop and variety, Bayer CropScience strongly recommends that only small areas or numbers of plants of each be treated and evaluated prior to commercial use.

BRASSICA (COLE) LEAFY VEGETABLES - SOIL 1/

Crops of Crop Group 5 including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lon*) broccoli, Chinese (*bok choy*) cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Leafhoppers	4.4 – 10.5
Thrips (foliage feeding thrips only)	4.4 - 10.5
Whiteflies	

Brassica Leafy Vegetables - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1½" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench, or hill drench;
- 6. Subsurface side-dress on both sides of each row. GAUCHO 550 SC INSECTICIDE must be incorporated into root-zone.

Brassica Leafy Vegetables - Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

BRASSICA (COLE) LEAFY VEGETABLES 1/ - FOLIAR

Crops of Crop Group 5 including: Broccoli, Broccoli raab (*rapini*), Brussels sprouts, Cabbage, Cauliflower, Cavalo broccoli, Chinese (*gai lon*) broccoli, Chinese (*bok choy*) cabbage, Chinese (*napa*) cabbage, Chinese mustard (*gai choy*) cabbage, Collards, Kale, Kohlrabi, Mizuna, Mustard greens, Mustard spinach, Rape greens

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Flea beetles	4.0
Leafhoppers	1.3
Whiteflies	

Brassica (Cole) Leafy Vegetables – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 5 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 6.5 fluid ounces/Acre (0.23 lb Al/Acre)

1/2 Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

LEAFY GREENS VEGETABLES - SOIL 1/

Crops Of Crop Subgroup 4A plus Watercress including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water) Watercress (upland)

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	4.4 – 10.5

Leafy Vegetables - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1½" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench, or hill drench
- 6. Subsurface side-dress on both sides of each row. GAUCHO 550 SC INSECTICIDE must be incorporated into root-zone.

Leafy Vegetables - Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

LEAFY GREENS VEGETABLES 1/ - FOLIAR

Crops Of Crop Subgroup 4A plus Watercress including: Amaranth (leafy amaranth, Chinese spinach, tampala), Arugula (Roquette), Chervil, Chrysanthemum (edible leaved and garland), Corn salad, Cress (garden), Cress (upland, yellow rocket, winter cress), Dandelion, Dock (sorrel), Endive (escarole), Lettuce (head and leaf), Orach, Parsley, Purslane (garden and winter), Radicchio (red chicory), Spinach (including New Zealand and vine (Malabar spinach, Indian spinach)), Watercress (commercial production only, applications must not be made to native cress growing in streams or other bodies of water) Watercress (upland)

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Flea beetles	4.2
Leafhoppers	1.3
Whiteflies	

Leafy Green Vegetables (Crop Subgroup 4A) - Foliar Applications

For applications made to watercress, production fields must be drained of water at least 24 hours prior to application and water must not be reapplied to the field for a minimum of 24 hours following the application. Applications must be made to fully leafed-up canopies, only.

Leafy Green Vegetables (Crop Subgroup 4A) - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 5 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 6.5 fluid ounces/Acre (0.23 lb Al/Acre)

¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

LEAFY PETIOLE VEGETABLES – SOIL 1/

Crops of Crop Subgroup 4B including: Cardoon, Celery, Celtuce, Chinese celery (fresh leaves and stalk only), Florence fennel (including sweet anise, sweet fennel, Finocchio), Rhubarb, Swiss chard

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	4.4 – 10.5

Leafy Petiole Vegetables - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray directed on or below seed;
- 3. Narrow (2" or less) surface band spray over seed-line during planting incorporated to a depth of 1 to 1½" with sufficient irrigation within 24 hours of application;
- 4. Narrow band spray directly below eventual seed row in bedding operation 14 or fewer days before planting;
- 5. Post-seeding drench, transplant-water drench, or hill drench;
- 6. Subsurface side-dress on both sides of each row. GAUCHO 550 SC INSECTICIDE must be incorporated into root-zone.

Leafy Petiole Vegetables – Soil Application Restrictions

Pre-Harvest Interval (PHI): 45 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

LEGUME VEGETABLES 1/, Except Soybean (Dry) - SOIL

Crops of Crop Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean

Bean (Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed), Sword bean]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	7.0 – 10.5
Diseases Suppressed	
Symptoms of: Bean common mosaic virus (BCMV) Bean golden mosaic virus (BGMV) Beet curly top hybrigeminivirus (BCTV)	7.0 – 10.5

Legume Vegetables – Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray at planting directed on or below seed;
- 3. In a narrow (2" or less) surface band over seed-line during planting incorporated to a depth of 1 to 1 1/2" with sufficient irrigation within 24 hours following application;
- 4. In a narrow band directly below the eventual seed row in a bedding operation 7 or fewer days before planting;
- 5. As a post-seeding drench, transplant drench, or hill drench.

Legume Vegetables – Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

1 Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

LEGUME VEGETABLES 1/2, Except Soybean (Dry) - FOLIAR

Crops of Crop Group 6 including: Edible Podded and Succulent Shelled Pea and Bean and Dried Shelled Pea and Bean

Bean (Lupinus spp., includes grain lupin, sweet lupin, white lupin, and white sweet lupin)

Bean (*Phaseolus* spp., includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean)

Bean (*Vigna* spp., includes adzuki bean, asparagus bean, blackeyed pea, catjang, Chinese longbean, cowpea, Crowder pea, moth bean, mung bean, rice bean, Southern pea, urd bean, yardlong bean)

Pea (*Pisum* spp., includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea)

Other Beans and Peas [Broad bean (fava), Chickpea (garbanzo bean), Guar, Jackbean, Lablab bean (hyacinth bean), Lentil, Pigeon pea, Soybean (immature seed). Sword bean]

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Leafhoppers Whiteflies	1.2

Legume Vegetables – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 3.6 fluid ounces/Acre (0.13 lb Al/Acre)

¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

ROOT VEGETABLES – SOIL 1/

Crops of Crop Subgroup 1B except Sugarbeet plus Kava including: Beet (garden)^{2/}, Burdock (edible)^{2/}, Carrot^{2/}, Celeriac^{2/}, Chervil (turnip-rooted)^{2/}, Chicory^{2/}, Ginseng, Horseradish, Kava^{2/}, Parsley (turnip-rooted), Parsnip^{2/}, Radish^{2/}, Oriental radish (diakon)^{2/}, Rutabaga^{2/}. Salsify (oyster plant), Salsify (black)^{2/}, Salsify (Spanish), Skirret and Turnip^{2/}.

Pests Controlled	Rate fluid ounces/1000 row-feet	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	0.31 – 0.74	4.4 – 10.5

Root Vegetables - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. In-furrow spray (rate specified per 1000 row-feet) or, shanked-in 1 to 2 inches below seed depth during planting;
- 3. In a narrow (2 inches or less) band directly (1 to 2 inches) below the eventual seed row in a bedding operation 14 or fewer days before planting.

Root Vegetables – Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

Maximum GAUCHO 550 SC INSECTICIDE applications per crop season: 1

Root Vegetables - Soil Application Note

The rate applied affects the length of control. Use higher rate within the specified rate range where infestations occur later in crop development, or where pest pressure is continuous. GAUCHO 550 SC INSECTICIDE rates less than 0.31 fluid ounces/1000 row-feet will not provide adequate residual pest control. GAUCHO 550 SC INSECTICIDE treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

- ¹ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.
- ²/ Tops or greens from these crops may be utilized for food or feed.

TUBEROUS and CORM VEGETABLES - SOIL 1/

Crops of Crop Subgroup 1C including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Canna (edible, Queensland arrowroot), Cassava (bitter & sweet)^{2/}, Chayote (root), Chufa, Dasheen (taro)^{2/}, Ginger, Leren, Sweetpotato, Tanier (cocoyam)^{2/}, Turmeric, Yam bean (jicama, manoic pea), Yam (true)^{2/}

(For applications on Potato see Field Crops section)

Pests Controlled	Rate fluid ounces/1000 row-feet	Rate fluid ounces/Acre
Aphids Flea beetles Leafhoppers Thrips (foliage feeding thrips only) Whiteflies	0.31 - 0.74	4.4 – 10.5

Tuberous and Corm Vegetables - Soil Applications

Apply specified dosage in one of the following methods:

- 1. In-furrow spray (rate specified per 1000 row-feet) over planting material (hulis) or shanked-in 1 to 2 inches below hulis depth at planting:
- 2. Side-dress not more than 0.26 fluid ounces/1000 row-feet no later than 45 days after-planting. Observe the same PHI as above.

Tuberous and Corm Vegetables – Soil Application Restrictions

Pre-Harvest Interval (PHI): 3 days (leaves); 125 days (corms)

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

Maximum GAUCHO 550 SC INSECTICIDE applications per crop season: 1

Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per year, including seed treatment, soil and foliar uses. If Imidacloprid was previously applied to seed that has been planted at seeding rate of 400,000 seeds per acre, apply no more than 0.497 lb of active ingredient as foliar and/or soil uses.

Tuberous and Corm Vegetables – Soil Application Note

The rate applied affects the length of control. Use higher rate within the specified rate range where infestations occur later in crop development, or where pest pressure is continuous. GAUCHO 550 SC INSECTICIDE rates less than 0.31 fluid ounces/1000 row-feet may not provide adequate residual pest control. GAUCHO 550 SC INSECTICIDE treated crops grown on very high organic matter soils (muck) may also require additional pest management control.

- 1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.
- ²/ Tops or greens from these crops may be utilized for food or feed.

ROOT, TUBEROUS and CORM VEGETABLES 1/ - FOLIAR

Crops of Crop Group 1C (except sugarbeet) plus Kava including: Arracacha, Arrowroot, Artichoke (Chinese and Jerusalem), Beet (garden) ^{2/}, Burdock (edible) ^{2/}, Canna (edible, Queensland arrowroot), Carrot ^{2/}, Cassava (bitter & sweet) ^{2/}, Celeriac ^{2/}, Chayote (root), Chervil (turnip-rooted) ^{2/}, Chicory ^{2/}, Chufa, Dasheen (taro) ^{2/}, Ginger, Ginseng, Horseradish, Kava ^{2/, 3/}, Leren, Parsley (turnip-rooted), Parsnip ^{2/}, Radish ^{2/}, Oriental radish (diakon) ^{2/}, Rutabaga ^{2/}, Salsify (black) ^{2/}, Salsify (oyster plant), Salsify (Spanish), Skirret, Sweetpotato ^{2/}, Tanier (cocoyam) ^{2/}, Tumeric, Turnip ^{2/}, Yam bean (jicama, manoic pea), Yam (true) ^{2/}.

(For applications on Potato see Field Crops section)

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Flea beetles	1.0
Leafhoppers	1.2
Whiteflies	

Root, Tuberous and Corm Vegetables – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 5 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season on Radish: 1.2 fluid ounces/Acre (0.044 lb Al/A);

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season on all other crops: 3.7 fluid ounces/Acre (0.13 lb AI/A).

Maximum GAUCHO 550 SC INSECTICIDE applications per crop season: 1 on Radish; 3 on other crops.

- ¹/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.
- ²/ Tops or greens from these crops may be utilized for food or feed.
- ³/ Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

STRAWBERRY 1/ - SOIL (Annual and Perennial)

Pests Controlled	Rate fluid ounces/Acre
Aphids Whiteflies	10.5 – 14.0

Strawberry - Soil (Annual and Perennial) - Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment after plants are established or on perennial crops in early spring prior to bud opening;
- 2. As a plant material or plant hole treatment just prior to, or during transplanting.
- 3. As a band spray over-the-row in a minimum of 20 gallons of water per acre, followed immediately by overhead irrigation to incorporate product into root-zone. Do not use plastic or other mulches that limit movement of GAUCHO 550 SC INSECTICIDE into root zone.

Strawberry - Soil (Annual and Perennial) - Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Do not apply immediately prior to bud opening or during bloom or when bees are foraging.

Strawberry - Soil (Annual and Perennial) - Application Note

The rate applied affects the length of control. Use higher rate within the specified rate range where infestations may occur later in crop development or where pest pressure is continuous.

¹/ Do not use both soil application methods on the same crop in the same season.

STRAWBERRY 1/ - SOIL (Perennial, Post-Harvest)

Pests Controlled	Rate fluid ounces/Acre
White grub complex	
(grubs of Asiatic garden beetle, European and Masked	7.0 – 10.5
chafer, Japanese beetle, Oriental beetle)	

Strawberry - Soil (Perennial, Post-Harvest) Applications

Apply a single application post harvest to coincide with renovation of strawberry fields and during active egg-laying period of beetles. Apply specified dosage in one of the following methods:

- 1. As a ground spray via boom or backpack sprayer in a minimum of 20 gallons of water per acre;
- 2. As a row-band spray using an adjusted amount of product based on the treated row band area in proportion to the amount required per full acre. The bandwidth should be equivalent to the width of the anticipated fruiting bed:
- 3. As a chemigation application with 600 to 1000 gallons of water followed by 0.1 to 0.25 inches irrigation.

Strawberry - Soil (Perennial, Post-Harvest) Application Restrictions

Pre-Harvest Interval (PHI): 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 10.5 fluid ounces/Acre (0.38 lb Al/A)

Strawberry - Soil (Perennial, Post-Harvest) - Application Note

All soil-surface applications must be followed by 0.25 inches of rainfall or overhead irrigation water per acre within 2 hours of application. Failure to adequately incorporate GAUCHO 550 SC INSECTICIDE into egg-deposition zone may result in decreased activity.

¹/ Do not use both soil application methods on the same crop in the same season.

STRAWBERRY - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Spittlebugs	1.3
Whiteflies	

Strawberry - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 5 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 3.9 fluid ounces/Acre (0.14 lb Al/A);

Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

SUGAR BEET - SOIL 1/

For use only in CA

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Whiteflies Flea beetles	2.6 – 5.2
Diseases Suppressed	
Symptoms of: Western yellows / Beet curly top hybrigeminivirus (BCTV)	2.6 – 5.2

Sugar beet - Soil Application

Apply specified dosage in the following method:

1. Apply specified dosage in sufficient carrier volume to insure uniform application. Apply directly below each seed furrow either during the bedding operation immediately prior to planting or at the time of planting.

The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

Sugar beet - Soil Application Restrictions

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 5.2 fluid ounces/Acre (0.18 lb Al/Acre)

Regardless of formulation or method of application, apply no more than 0.5 lb active ingredient per acre per year, including seed treatment, soil <u>and</u> foliar uses. If Imidacloprid was previously applied to seed that has been planted at seeding rate of 40,000 seeds per acre, apply no more than 0.42 lb of active ingredient as foliar and/or soil uses.

Sugar Beet - Soil Application Note

The low rate may be applied to aid establishment of stands in whitefly areas, or for early season control of the other pests listed.

1/ Not for use on crops grown for seed unless allowed by state specific 24(c) labeling.

GAUCHO 550 SC INSECTICIDE CONVERSION CHART FOR LINEAR APPLICATION

	RATE fluid ounces/1000 row-feet									
RATE fluid ounces per Acre	Based on <u>average</u> row spacing (in inches):									
	10	15	20	25	30	34	36	38	40	45
5.0	0.10	0.14	0.19	0.24	0.29	0.33	0.34	0.36	0.38	0.43
5.5	0.11	0.16	0.21	0.26	0.32	0.36	0.38	0.40	0.42	0.47
6.0	0.11	0.17	0.23	0.29	0.34	0.39	0.41	0.44	0.46	0.52
6.5	0.12	0.19	0.25	0.31	0.37	0.42	0.45	0.47	0.50	0.56
7.0	0.13	0.20	0.27	0.33	0.40	0.46	0.48	0.51	0.54	0.60
7.5	0.14	0.22	0.29	0.36	0.43	0.49	0.52	0.55	0.57	0.65
8.0	0.15	0.23	0.31	0.38	0.46	0.52	0.55	0.58	0.61	0.69
8.5	0.16	0.24	0.33	0.41	0.49	0.55	0.59	0.62	0.65	0.73
9.0	0.17	0.26	0.34	0.43	0.52	0.59	0.62	0.65	0.69	0.77
9.5	0.18	0.27	0.36	0.45	0.55	0.62	0.65	0.69	0.73	0.82
10.0	0.19	0.29	0.38	0.48	0.57	0.65	0.69	0.73	0.77	0.86
10.5	0.20	0.30	0.40	0.50	0.60	0.68	0.72	0.76	0.80	0.90
11.0	0.21	0.32	0.42	0.53	0.63	0.72	0.76	0.80	0.84	0.95
11.5	0.22	0.33	0.44	0.55	0.66	0.75	0.79	0.84	0.88	0.99
12.0	0.23	0.34	0.46	0.57	0.69	0.78	0.83	0.87	0.92	1.03
12.5	0.24	0.36	0.48	0.60	0.72	0.81	0.86	0.91	0.96	1.08
13.0	0.25	0.37	0.50	0.62	0.75	0.85	0.90	0.95	0.99	1.12
13.5	0.26	0.39	0.52	0.65	0.77	0.88	0.93	0.98	1.03	1.16
14.0	0.27	0.40	0.54	0.67	0.80	0.91	0.96	1.02	1.07	1.21

Important Note: The GAUCHO 550 SC INSECTICIDE rate applied affects the length of control and to a considerable extent, the degree of control or effect. Row-spacing X GAUCHO 550 SC INSECTICIDE rate combinations in shaded blocks may not provide adequate residual pest control and are not recommended for long-term, residual control. Use higher labeled rates where infestations may occur later in crop development or where pest pressure is continuous. Bayer CropScience offers no warranty for use of GAUCHO 550 SC INSECTICIDE at rates below 0.31 fluid ounces/1000 row-feet.

TREE, BUSH and VINE CROPS Application Rates – GAUCHO 550 SC Insecticide

BANANA and PLANTAIN - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers	7.0 – 14.0
Pest Suppressed	
Scales	7.0 – 14.0

Banana and Plantain - Soil Application

Apply specified dosage of GAUCHO 550 SC INSECTICIDE in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Banana and Plantain - Soil Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/A)

BANANA and PLANTAIN – FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Leafhoppers Thrips	2.8
Thrips	

Banana and Plantain - Foliar Applications

Apply specified dosage of GAUCHO 550 SC INSECTICIDE as a broadcast or directed spray to infested area insuring thorough coverage. GAUCHO 550 SC INSECTICIDE may be applied through properly calibrated ground or aerial application equipment. Aerial application of GAUCHO 550 SC INSECTICIDE may result in slower activity and reduced control relative to results from ground application.

Banana and Plantain – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Minimum interval between applications: 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb AI/A)

BUSHBERRY - SOIL

Crops of Crop Subgroup 13B Including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Ligonberry, Salal

Pests Controlled	Rate fluid ounces/Acre
Japanese beetle (adults, feeding on foliage)	
White grub complex	7.0 – 14.0
(grubs of Asiatic garden beetle, European and Masked chafer, Japanese beetle and Oriental beetle)	

Bushberry – Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. 18-inch band on each side of the row followed by irrigation immediately after application.

Application may be made post-bloom up to 7 days prior to harvest, or post-harvest until October 1st.

Application to grass covered rows, row middles, drive lanes, headlands, and other grassy areas in and around the berry field will control resident grub populations. Applications directed to the root-zone will help protect berry plant roots from grub feeding. Apply GAUCHO 550 SC INSECTICIDE to moist soil. If necessary, apply one hour of irrigation water immediately before application of GAUCHO 550 SC INSECTICIDE. To ensure maximum efficacy of soil surface sprays, 1/2 to 1 inch of irrigation water or rainfall must be applied or received within 24 hours of application of GAUCHO 550 SC INSECTICIDE to facilitate movement into the soil and into the root-zone.

Bushberry – Soil Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

BUSHBERRY - FOLIAR

Crops of Crop Subgroup 13B Including: Blueberry, Currant, Elderberry, Gooseberry, Huckleberry, Juneberry, Ligonberry, Salal

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters	1.0 – 1.4
Blueberry maggot Japanese beetle (adults) Thrips (foliage feeding thrips only)	2.1 – 2.8

Bushberry - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 3 days

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Maximum number of GAUCHO 550 SC INSECTICIDE applications per year: 5

Minimum application volume (water): 20.0 GPA – ground; 5.0 GPA – aerial.

Do not apply pre-bloom or during bloom or when bees are foraging.

CANEBERRY - SOIL

Crops of Crop Subgroup 13A including:

Blackberry (*Rubus eubatus*, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these)

Raspberry (black and red, Rubus occidentalis, Rubus strigosus, Rubus idaeus)

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers	
Leafhoppers	7.0 – 14.0
Whiteflies	
Rednecked cane borer	10.5 – 14.0
Pest Suppressed	
Thrips (foliage feeding thrips only)	7.0 – 14.0

Caneberry - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Basal, soil drench in a minimum of 500 gallons solution per acre.

Caneberry – Soil Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

CANEBERRY - FOLIAR

Crops of Crop Subgroup 13A including:

Blackberry (*Rubus eubatus*, including bingleberry, black satin berry, boysenberry, Cherokee blackberry, Chesterberry, Cheyenne blackberry, coryberry, darrowberry, Dirksen thornless berry, Himalayaberry, hullberry, Lavacaberry, Loganberry, lowberry, Lucretiaberry, mammoth blackberry, marionberry, nectarberry, olallieberry, Oregon evergreen berry, phenomenalberry, rangeberry, ravenberry, rossberry, Shawnee blackberry, youngberry, and varieties and/or hybrids of these)

Raspberry (black and red, Rubus occidentalis, Rubus strigosus, Rubus idaeus)

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Leafhoppers	2.8
Thrips (foliage feeding thrips, only)	

Caneberry - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 3 days

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.4 fluid ounces/Acre (0.3 lb Al/Acre)

CITRUS (Containerized) - SOIL

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate mL / "citra pot" (0.1 ft ³ container media)		
Aphids			
Asian citrus psyllid			
Blackfly			
Citrus leafminer			
Leafhoppers/Sharpshooters	0.33 - 0.50		
Mealybugs			
Scales			
Whiteflies			
Citrus root weevil (larval complex)			
Pest Suppressed			
Citrus thrips (foliage feeding thrips only)	0.50		

Citrus (Containerized) - Soil Applications

For commercial nursery production in standard "citra pot" of 0.1 ft³ volume

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Basal, soil drench in a minimum of 30 milliliters (mLs) total solution per "citra pot".

Use sufficient carrier volume to ensure thorough uniform distribution throughout the media without loss of gravitational water from the container. For optimal results, treatment should be made at planting/transplanting prior to insect infestation. Retreat if necessary but do not apply more than 3.0 mLs per plant per season. For control of larvae of the citrus root weevil complex, apply prior to neonate larvae entering potting media.

Application - For citrus production with other container volumes

Determine volume of container and calculate required dosage based on 0.50 mLs / 0.1 ft³ potting media. Apply calculated dosage per container as described above. Do not exceed rate of 3.0 mLs / plant per crop season regardless of container size.

Citrus (containerized) - Soil Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum GAUCHO 550 SC INSECTICIDE allowed per application: 0.50 mLs / 0.1 ft³ container media.

Maximum GAUCHO 550 SC INSECTICIDE allowed per crop season: 3.0 mLs / plant.

Do not apply pre-bloom or during bloom or when bees are foraging.

Citrus (containerized) - Soil Application Notes

- 1. **Application For citrus production with other container volumes:** Determine volume of container and calculate required dosage based on 0.50 mLs / 0.1 ft³ potting media. Apply calculated dosage per container as described above. Do not exceed rate of 3.0 mLs / plant per crop season regardless of container size.
- 2. **Phytotoxic Response Potential:** If you have no experience with GAUCHO 550 SC INSECTICIDE on containerized citrus of a specific variety/hybrid, treat only a few plants and observe for phytotoxic effects for up to 60 days prior to treating entire nursery.
- 3. **PLEASE NOTE:** Not all varieties or hybrids of citrus have been tested for phytotoxic response following a GAUCHO 550 SC INSECTICIDE application.

CITRUS (Field) - SOIL

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, and other cultivars and/or hybrids of these.

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Asian citrus psyllid	
Blackfly	
Citrus leafminer	
Leafhoppers/Sharpshooters	7.0 – 14.0
Mealybugs	
Scales	
Termites (FL only)	
Whiteflies	
Pests / Diseases Suppressed	
Citrus nematode	
Symptoms of:	
Citrus tristeza virus (CTV) through vector control	14.0
Citrus yellows	
Thrips (foliage feeding thrips only)	

Citrus (Field) - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment. For optimum results, apply to newly planted trees or those previously trained to drip, trickle or micro-sprinkler irrigation. Soil must be lightly prewetted to break soil surface tension prior to applications of GAUCHO 550 SC INSECTICIDE. Chemigation application can be made separate to normal irrigation but followed by 10 to 20 minutes of additional watering to move GAUCHO 550 SC INSECTICIDE into root-zone. Allow 24 hours before initiating subsequent irrigations:
- Band spray soil surface on both sides of the tree. Overlap bands at the tree base to create a continuous band within the drip-line
 area of the tree, to be followed immediately with light sprinkler irrigation sufficient to move the product into the upper portion of
 the root-zone. This method is suitable for very coarse soils with 0.75% organic matter or less;
- Drench to base of tree not exceeding one-quart total solution per tree immediately around trunk of tree and extending outward
 covering the entire fibrous root system of the tree. For Florida citrus, only use this treatment method is only recommended for
 trees up to 8 feet tall:
- 4. For control of existing termite infestations, apply specified dosage in 1 to 4 quarts of total solution volume, depending on size of tree, as a drench application to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk.
- 5. For suppression of citrus nematode, apply specified dosage through low-pressure chemigation or soil surface band spray only, ensuring complete coverage of the root system and utilizing application directions stated above for the respective application method. Repeated and regular use of GAUCHO 550 SC INSECTICIDE over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

Citrus (Field) - Soil Applications Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

CITRUS (Field) - FOLIAR

Crops of Crop Group 10 Including: Calamondin, Citrus citron, Citrus hybrids (includes chironja, tangelo, and tangor), Grapefruit, Kumquat, Lemon, Lime, Mandarin (tangerine), Pummelo, Orange (sweet and sour), Satsuma mandarin, White sapote (Casimiroa spp), and other cultivars and/or hybrids of these.

Pests Controlled	Rate fluid ounces/Acre	
Aphids Asian citrus psyllid Blackfly Leafhoppers/Sharpshooters Leafminers Mealybugs Scales Whiteflies	3.5 – 7.0	
Pest Suppressed		
Thrips (foliage feeding thrips only)	3.5 – 7.0	

Citrus (Field) - Foliar Applications

Scales – time applications to the crawler stage. Treat each generation.

Citrus (Field) - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Minimum interval between applications: 10 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/A)

Do not apply during bloom or within 10 days prior to bloom or when bees are foraging.

COFFEE - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers Leafminer	7.0 – 14.0
Pest Suppressed	
Scales	7.0 – 14.0

Coffee - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
- 3. Basal, soil drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

Coffee - Soil Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

COFFEE - FOLIAR

Pests Controlled	Rate fluid ounces/Acre		
Aphids Leafhoppers Leafminer	2.8		
Pest Suppressed			
Scales	2.8		

Coffee - Foliar Application

Apply specified dosage of GAUCHO 550 SC INSECTICIDE as a broadcast or directed spray to infested area insuring thorough coverage. GAUCHO 550 SC INSECTICIDE may be applied through properly calibrated ground or aerial application equipment. Aerial application of GAUCHO 550 SC INSECTICIDE may result in slower activity and reduced control relative to results from ground application.

Coffee – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

CRANBERRY - SOIL

Pests Controlled	Rate fluid ounces/Acre
Rootgrubs (Scarabaeidae) Rootworms (Chrysomelidae)	7.0 – 14.0

Cranberry - Soil Applications

Apply specified dosage to moist soil in one of the following methods:

- 1. As a soil spray (ground application) directed to the root and crown area using a minimum of 20 gal of water per acre;
- 2. As a chemigation application with 600 to 1000 gal water.

Immediately upon application, GAUCHO 550 SC INSECTICIDE must be incorporated into root-zone by 0.1 - 0.3 inches water/Acre, either with the chemigation application or through irrigation/rainfall if not applied through chemigation. Inadequate incorporation within 24 hours of application may result in reduced control.

Cranberry - Soil Application Restrictions

Pre-Harvest Interval (PHI): 30 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Do not apply immediately pre-bloom or during bloom or when bees are foraging

Cranberry - Soil Application Note - Rootgrubs and Rootworms

Best control may be achieved when application is made post-bloom immediately after bees are removed. Applications should target early instar larvae.

GAUCHO 550 SC INSECTICIDE has not been tested for crop response in tank mixes with other registered fungicides or insecticides. If tank mixing is desired, premix a sample of the GAUCHO 550 SC INSECTICIDE and the desired fungicide or insecticide partner at labeled rates and apply to a small area. Evaluate crop response within 48 hours and for at least two weeks prior to utilizing the tank mix on larger acreage. If crop injury results from the premix test, do not apply the tank mix to larger acreage.

GRAPE - SOIL

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate fluid ounces/Acre
European fruit lecanium Leafhoppers/Sharpshooters Mealybugs Phylloxera * spp	7.0 – 14.0
Pests / Diseases Suppressed	
Grapeleaf skeletonizer Nematodes Pierce's disease	10.5 – 14.0

Grape – Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
- 3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.
- 4. For suppression of nematodes, apply 14 fluid ounces in a single application or two 7 fluid ounce applications on a 30 to 45 day interval. Apply only by 1) chemigation into root-zone through above ground low-pressure drip, trickle, micro-sprinkler or equivalent equipment; or 2) French plow technique, followed immediately by sufficient irrigation to move the product into the entire root-zone of the plant. Repeated and regular use of GAUCHO 550 SC INSECTICIDE over several consecutive growing seasons provides the greatest degree of nematode suppression and yields the greatest plant response.

Use a total of 14 fluid ounces/Acre is recommended under any of the following conditions:

- 1. Where vigorous vine growth is expected;
- 2. In warmer growing areas;
- 3. Where mealybug and European fruit lecanium populations are expected to be heavy;
- 4. Where vine populations exceed 600 per acre, or;
- 5. For suppression of nematodes.
- * Repeated and regular use of GAUCHO 550 SC INSECTICIDE over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

Grape – Soil Application Restrictions

Pre-Harvest Interval (PHI): 30 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Grape – Soil Application Note: Repeated and regular use of GAUCHO 550 SC INSECTICIDE over several, consecutive growing seasons controls existing *Phylloxera* infestations over time or prevents *Phylloxera* from becoming established.

GRAPE - FOLIAR

Including: American bunch grape, Muscadine grape and Vinifera grape

Pests Controlled	Rate fluid ounces/Acre
Leafhoppers/Sharpshooters Mealybugs	1.0 – 1.4
Pest / Disease Suppressed	
Grapeleaf skeletonizer	1.3 – 1.4

Grape – Foliar Applications

GAUCHO 550 SC INSECTICIDE may be applied by ground application, only.

Grape – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 0 days

Minimum interval between applications: 14 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 2.8 fluid ounces/Acre (0.1 lb Al/Acre)

HOPS - SOIL

Pest Controlled	Rate fluid ounces/Acre
Aphids	2.8 - 8.4

Hop - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. Subsurface side-dress shanked into the root-zone on both sides of the plants followed by irrigation;
- 3. Hill drench in sufficient water to insure incorporation into the root-zone followed by irrigation.

Use higher dosage where extended residual control is desired or for treating larger vines or vines with dense foliage volume.

Hop – Soil Application Restrictions

Pre-Harvest Interval (PHI): 60 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.4 fluid ounces/Acre (0.3 lb Al/Acre)

HOPS - FOLIAR

Pest Controlled	Rate fluid ounces/Acre
Aphids	2.8

Hop - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 28 days

Minimum interval between applications: 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.4 fluid ounces/Acre (0.3 lb Al/Acre)

POME FRUIT - SOIL

Crops Of Crop Group 11 Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate fluid ounces/Acre
Aphids (including woolly apple aphid) Leafhoppers	7.0 – 10.5

Pome Fruit - Soil Application

Apply specified dosage in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Pome Fruit - Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

POME FRUIT - FOLIAR

Crops Of Crop Group 11 Including: Apple, Crabapple, Loquat, Mayhaw, Pear (including Oriental pear), Quince

Pests Controlled	Rate fluid ounces/Acre
Leafhoppers	1.4 – 2.8
Aphids (except woolly apple aphid)	
Apple maggot	2.8
Leafminers	2.0
San Jose scale	
FOR PEAR, ONLY	
Mealybugs	7.0
Pear psylla	

Pome Fruit -Foliar Application

Applications targeting apple maggot should be combined with manufacturer's listed rate of a sticker.

Pome Fruit -Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 10 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb AI/A)

Do not apply pre-bloom or during bloom or when bees are foraging.

POMEGRANATE - SOIL

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Leafhoppers/Sharpshooters	7.0 – 14.0
Whiteflies	

Pomegranate - Soil Application

Apply specified dosage in the following method:

1. Chemigation into the root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Pomegranate - Soil Application Restrictions

Pre-Harvest Interval (PHI): 0 day

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre).

Do not apply pre-bloom or during bloom or when bees are foraging.

POMEGRANATE - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Whiteflies	2.8
Pest Suppressed	
Scales	2.8

Pomegranate - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 day

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.4 fluid ounces/Acre (0.3 lb Al/Acre).

STONE FRUIT - SOIL

Crops Of Crop Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese). Plumcot, Prune (fresh and dried)

Pests Controlled	Rate fluid ounces/Acre
Aphids (including woolly apple aphid) Leafhoppers	7.0 – 10.5

Stone Fruit - Soil Applications

Apply specified dosage in the following method:

1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Stone Fruit - Soil Application Restrictions

Pre-Harvest Interval (PHI): 21 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 10.5 fluid ounces/Acre (0.38 lb Al/Acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

STONE FRUIT - PRE-PLANT, ROOT-DIP

Crops Of Crop Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese). Plumcot. Prune (fresh and dried)

Pest Controlled	Rate fluid ounces/10 gallons root-dip solution
Black peach aphid (infesting roots)	0.87 (26 mLs)

Stone Fruit - Pre-plant Root-dip Applications

Mix GAUCHO 550 SC INSECTICIDE at 0.87 fluid ounces (26 mLs) per 10 gallons of water. Thoroughly wet bare-root transplant to slightly above the graft union by soaking roots in the GAUCHO 550 SC INSECTICIDE solution for up to 5 minutes. Allow solution to dry on roots and transplant trees as soon as possible following treatment.

STONE FRUIT - FOLIAR

Crops Of Crop Group 12 Including: Apricot, Cherry (including sweet and tart), Nectarine, Peach, Plum (including Chickasaw, Damson and Japanese). Plumcot. Prune (fresh and dried)

Pests Controlled	Rate fluid ounces/Acre
Aphids Green June beetle Japanese beetle Leafhoppers/Sharpshooters Plant bugs Rose chafer San Jose scale	1.4 – 2.8
Cherry fruit fly	2.0 – 2.8
Pests Suppressed	
Plum curculio Stink bugs	2.8

Stone Fruit - Foliar Application Restrictions - Apricot, Nectarine, Peach:

Pre-Harvest Interval (PHI): 0 day

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 8.4 fluid ounces/Acre (0.3 lb AI/A)

Minimum application volume (water): 50 GPA – ground application; 25 GPA – aerial application.

Do not apply pre-bloom or during bloom or when bees are foraging.

Stone Fruit - Foliar Application Restrictions - Cherries, Plums, Plumcot, Prune:

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 10 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/A)

Minimum application volume (water): 50 GPA – ground application; 25 GPA – aerial application

TREE NUTS - SOIL

Crops of Crop Group 14 except Almond including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut [black and English]

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Mealybugs Spittlebugs Termites Whiteflies	7.0 – 14.0
Pests / Diseases Suppressed	
Pecan scab (from reduction in honeydew deposition)	7.0 – 14.0
Thrips (foliage-feeding thrips only)	14.0

Tree Nuts - Soil Applications

Apply specified dosage prior to or at onset of pest infestation in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent irrigation equipment. Pre-wet soil prior to applications of GAUCHO 550 SC INSECTICIDE and allow soil to dry following application and prior to subsequent irrigation;
- 2. Emitter or spot application in a minimum of 4 fluid ounces of mixture per emitter site;
- 3. Shank or subsurface side-dress, injected to a depth just above or just within the root zone and between the trunk and drip line of the tree canopy. Apply product in a minimum of 10 gallons per acre using multiple shanks on both sides of trees. Ensure product placement is below sod or orchard floor debris. Irrigation covering entire treated area should follow within 48 hours to promote uptake by root system.
- 4. For control of termites, apply specified dosage to slightly moist soil as a high-volume drench to the basal portion of the tree trunk and surrounding soil in the immediate vicinity of the tree trunk. Utilize sufficient carrier volume to penetrate the soil to a depth of 18 24 inches to obtain optimum control. Allow soil to dry following treatment and prior to applying any irrigation.

Tree Nuts – Soil Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Tree Nuts – Soil Application Remarks

Use the higher rate within the specified rate range when applied by shank or subsurface sidedress, used on larger trees, soils with high clay content, for high plant populations, and/or where extended control is desired. Under some conditions, control may not occur for 14 or more days or until two (2) irrigations have been made. Applications made later in the season may result in reduced efficacy.

TREE NUTS - FOLIAR

Crops of Crop Group 14 except Almond including: Beechnut, Brazil nut, Butternut, Cashew, Chestnut, Chinquapin, Filbert, Hickory nut, Macadamia nut, Pecan, Pistachio, Walnut [black and English]

Pests Controlled	Rate fluid ounces/Acre
Aphids (except Black pecan aphid) Leafhoppers/Sharpshooters Phylloxera sp. (leaf infestations) Spittlebugs Whiteflies	1.2 – 2.4
Black pecan aphid Mealybugs San Jose scale	2.8

Tree Nuts - Foliar Applications

Applications for control of San Jose scale should be timed according to crawler stage, treating each successive generation. Two applications on a 10 to 14-day interval may be required to achieve control.

Tree Nuts - Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 6 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 10.0 fluid ounces/Acre (0.36 lb Al/A)

Minimum application volume (water): 50 GPA – ground application, 25 GPA – aerial application

TROPICAL FRUIT - SOIL

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate fluid ounces/Acre
Aphids Avocado lace bug Leafhoppers Whiteflies	10.5 – 14.0
Pests Suppressed	
Scales Thrips (foliage feeding thrips only)	14.0

Tropical Fruit - Soil Application

Apply specified dosage in the following method:

1. Chemigation through low-pressure drip, trickle, micro-sprinkler or equivalent equipment.

Tropical Fruit – Soil Application Restrictions

Pre-Harvest Interval (PHI): 6 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb AI/A).

Do not apply pre-bloom or during bloom or when bees are foraging.

TROPICAL FRUIT - FOLIAR

Including: Acerola, Atemoya, Avocado, Birida, Black sapote, Canistel, Cherimoya, Custard apple, Feijoa, Jaboticaba, Guava, Llama, Longan, Lychee, Mamey sapote, Mango, Papaya, Passionfruit, Persimmon, Pulasan, Rambutan, Sapodilla, Soursop, Spanish lime, Star apple, Starfruit, Sugar apple, Wax jambu

Pests Controlled	Rate fluid ounces/Acre
Aphids Leafhoppers/Sharpshooters Mealybugs Thrips (foliage feeding thrips only) Whiteflies	2.8
Pest Suppressed	
Scales	2.8

Tropical Fruit – Foliar Application Restrictions

Pre-Harvest Interval (PHI): 7 days

Minimum interval between applications: 10 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb AI/A)

OTHER CROPS Application Rates – GAUCHO 550 SC INSECTICIDE

CHRISTMAS TREE - SOIL

Pests Controlled	Rate fluid ounces/Acre
White grub complex (damage from grubs of Asiatic garden beetle, European and	7.0 – 14.0
Masked chafer, Japanese beetle and oriental beetle)	7.0 – 14.0

Christmas Tree - Soil Applications

Soil incorporation and movement of GAUCHO 550 SC INSECTICIDE to the root-zone is required for activity. GAUCHO 550 SC INSECTICIDE can be incorporated most readily when applied to moist soil. Apply specified dosage in one of the following methods:

- 1. Chemigation into root-zone through low-pressure drip, trickle, micro-sprinkler or equivalent equipment;
- 2. 18-inch band on each side of the row (small trees) to full broadcast application (large trees) followed by rainfall or 0.25 1 inch of irrigation within 12 hours after application.

Christmas Tree - Soil Application Restriction

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

CHRISTMAS TREE - FOLIAR

Pests Controlled	Rate fluid ounces/Acre
Aphids	
Adelgids Sawflies	1.4 – 2.8
Sawflies	

Christmas Tree - Foliar Applications

Gall-forming adelgids – time applications to coincide with full bud-swell or first bud-break of earliest bud-breaking trees. Once galls form spraying will be ineffective.

Christmas Tree - Foliar Application Restrictions

Minimum interval between applications: 7 days

Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

POPLAR / COTTONWOOD - SOIL 1/

(includes members of the genus Populus grown for pulp or timber)

Pests Controlled	Rate fluid ounces/Acre
Aphids Cottonwood leaf beetle	7.0 – 14.0
Pest Suppressed	
Phylloxerina popularia	7.0 – 14.0

Poplar / Cottonwood - Soil Applications

Apply specified dosage in one of the following methods:

- 1. Chemigation through low-pressure drip irrigation.
- 2. For narrow-row, cutting orchards/nurseries used for plant propagation, shank into root-zone followed by adequate irrigation to promote uptake. (Adequate irrigation depends on soil moisture level at application. Under dry conditions, use 0.25 inches/Acre).

Poplar / Cottonwood - Soil Applications Restrictions

Maximum GAUCHO 550 SC INSECTICIDE allowed at-plant per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

Do not apply pre-bloom or during bloom or when bees are foraging.

Poplar / Cottonwood - Soil Application Notes

For Cottonwood leaf beetle, protection against damage will occur when application is made early-season, when the beetles first begin feeding. Larger trees may require earlier treatment as a result of slower uptake.

For Phylloxerina, apply early in the year, from break of dormancy through May.

For Cottonwood leaf beetle, protection against damage will occur when application is made early-season, when the beetles first begin feeding. Larger trees may require earlier treatment as a result of slower uptake.

For Phylloxerina, apply early in the year, from break of dormancy through May.

¹/ Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

POPLAR / COTTONWOOD - CUTTINGS/WHIPS SOAK 1/

(includes members of the genus *Populus* grown for pulp or timber)

(includes members of the genus r opulus grown for pulp o	Cuttings/Whips Soaking Solution
Pest Controlled	fluid ounces GAUCHO 550 SC INSECTICIDE Needed per 100
	gallons
Cottonwood leaf beetle	5.8 – 11.6 (unhydrated cuttings/whips)
	11.6 – 17.5 (partially hydrated cuttings/whips)
Pests Suppressed	
Aphids	5.8 – 11.6 (unhydrated cuttings/whips)
Phylloxerina popularia	11.6 – 17.5 (partially hydrated cuttings/whips)

Poplar / Cottonwood – Cuttings/Whips Applications

Moisture content of cuttings/whips prior to application, the solution concentration and the length of soaking interval interact to affect the amount of product absorbed into plant material. For a constant soaking interval of 24 hours, drier cuttings/whips absorb a higher quantity of solution and require a lower concentration. Conversely, more hydrated cuttings/whips absorb less solution and require a higher concentration. Soaking of cuttings/whips should occur in a covered container in absence of UV light. Not all Populus sp. clones/varieties/hybrids have been tested for crop safety. Without specific knowledge about a particular *Populus* sp.

clone/variety/hybrid, Bayer CropScience recommends that small numbers of cuttings/whips of each be treated and evaluated prior to commercial use.

Apply GAUCHO 550 SC INSECTICIDE in one of the following cuttings/whips soaking methods:

- 1. For freshly cut (unhydrated) cuttings/whips, soak plant material in specified solution concentration for 24 hours prior to cold storage. After removal from cold storage, plant as needed.
- 2. For previously hydrated cuttings/whips removed from cold storage, allow plant material to reach room temperature and soak in specified solution concentration for 24 hours prior to planting.

 Proper care must be taken in disposal of any residual soaking solution. Solution may be applied to existing trees or other registered

crops as long as all product label precautions and restrictions are observed.

Poplar / Cottonwood - Cuttings/Whips Applications Restrictions

Maximum GAUCHO 550 SC INSECTICIDE allowed at-plant per year: 14.0 fluid ounces/Acre (0.5 lb Al/Acre)

¹/ Use not permitted in California unless otherwise directed by state specific 24(c) labeling.

POPLAR / COTTONWOOD - FOLIAR 1/

(includes members of the genus Populus grown for pulp or timber)

Pests Controlled	Rate fluid ounces/Acre
Aphids	1.4 – 2.8
Cottonwood leaf beetle	1.4 – 2.0
Poplar / Cottonwood – Foliar Application Restrictions	
Minimum interval between applications: 10 days	
Maximum GAUCHO 550 SC INSECTICIDE allowed per year: 14.0 fluid ounces/Acre (0.5 lb Al/A)	
Do not apply pre-bloom or during bloom or when bees are foraging.	
1/ Use not permitted in California unless otherwise directed by	state specific 24(c) labeling

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. If container is leaking or material spilled for any reason or cause, carefully dam up spilled material to prevent runoff. Refer to Precautionary Statements on label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away. You may contact the Bayer CropScience Emergency Response Team for decontamination procedures or any other assistance that may be necessary. The Bayer CropScience Emergency Response telephone number is 1-800-334-7577.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

Offer for recycling, if available or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.

IMPORTANT: READ BEFORE USE

Read the entire Directions for Use, Conditions, Disclaimer of Warranties and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product container at once.

By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties and Limitations of Liability.

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